

Consultation response

Part 1: Your details

Original language of response: English

Name: Ian Maxwell

Country of residence: Belgium

Are you willing to let us publish your response publicly on the Global Tailings Review website? Yes

Please select which stakeholder group you are representing: Investor

If 'Other', please specify below:

Are you responding on behalf of an organization? Yes

Please give the name of the organization: Pacific Road Capital

Your level within the organisation: Executive Management

Part 2: Your views on each of the Principles and Requirements in the Standard

Topic 1: Knowledge Base

Principle 1

In your view, will compliance with this Principle and its Requirements contribute to the prevention of catastrophic failure of tailings facilities?

Yes

Which aspects of Principle 1 do your comments relate to?

Your comments on Principle 1

Principle 2

In your view, will compliance with this Principle and its Requirements contribute to the prevention of catastrophic failure of tailings facilities?

Yes

Which aspects of Principle 2 do your comments relate to?

Requirement 2.6, Requirement 2.5

Your comments on Principle 2

Requirement 2.5 - 'financial assurance' - We should make this a defined term.

Requirement 2.6 - 'the operator will consider obtaining appropriate insurance to the extent commercially reasonable or providing other forms of financial assurance'.

Please check with the insurance people at the Summit. I doubt this will be

commercially available for all.

Topic II: Affected Communities

Principle 3

In your view, will compliance with this Principle and its Requirements contribute to the prevention of catastrophic failure of tailings facilities?

Yes

Which aspects of Principle 3 do your comments relate to?

Requirement 3.3

Your comments on Principle 3

Requirement 3.3 - the Operator shall consider "in good faith". Wording is too weak. Should say "the operator must implement". If the facility could result in loss of life or displacement there is a responsibility to minimise that risk.

Topic III: Design, Construction, Operation and Monitoring of the Tailings Facility

Principle 4

In your view, will compliance with this Principle and its Requirements contribute to the prevention of catastrophic failure of tailings facilities?

Partially

Which aspects of Principle 4 do your comments relate to?

Requirement 4.2, Requirement 4.3

Your comments on Principle 4

Requirements 4.2 & 4.3 - If a Tailings Storage Facility is to be downgraded from 'Extreme' to a lower classification level this should be a Board decision, not an Executive decision. Investors through their Board representatives should have a right to input into / review this effectively one-off decision, given it takes a Board-level material risk and repositions it as a non-Board level decision with lower oversight. Further, Executives are more open to internal corporate and incentive influences than the Board.

Principle 5

In your view, will compliance with this Principle and its Requirements contribute to the prevention of catastrophic failure of tailings facilities?

Yes

Which aspects of Principle 5 do your comments relate to?

Requirement 5.4

Your comments on Principle 5

Requirement 5.4 - Address all 'credible' failure modes - change to 'all potential failure modes'. It is oftentimes the case in risk management that a failure mode

only becomes credible after a major failure. Same logic applies to a number of the other requirements through the draft.

Principle 6

In your view, will compliance with this Principle and its Requirements contribute to the prevention of catastrophic failure of tailings facilities?

Yes

Which aspects of Principle 6 do your comments relate to?

Your comments on Principle 6:

Principle 7

In your view, will compliance with this Principle and its Requirements contribute to the prevention of catastrophic failure of tailings facilities?

Partially

Which aspects of Principle 7 do your comments relate to?

Requirement 7.2, Requirement 7.4, Requirement 7.5

Your comments on Principle 7

Principle 7 - Regarding the Governance process required to ensure effective management and control of the Tailings Storage Facility operation in accordance with the design criteria for the facility. Needs to be an explicit statement that the people on-site and / or who are responsible for the day to day management of the facility are getting sign-off from an Independent Expert on an ongoing basis. Whilst the standard makes reference to both the Engineer Of Record (EOR) and Responsible Tailings Facility Expert (RTFE), the distinction of independence is not clear. In a large multi asset company (eg BHP / RIO) it could be a "Consulting Engineer" that is independent from the site. In a small / medium sized company this would be external to the Company. We have highlighted the requirements below that talk to the process (which is correct), but do not adequately differentiate between the role players and the independence of those role players (refer also pdf below). In our opinion this governance distinction is critical. Requirement 7.2: Manage the quality and adequacy of the construction and operation process by implementing Quality Control, Quality Assurance and Construction vs Design Intent Verification (CDIV). CDIV shall be used to ensure that the design intent is implemented and is still being met if the site conditions vary from the design assumptions. Requirement 7.4: Develop, implement and annually update an Operations, Maintenance and Surveillance (OMS) Manual that supports effective risk management as part of the TMS. The OMS Manual should follow best practices, clearly provide the context and critical controls for safe operations, and be reviewed for effectiveness. The EOR and RTFE shall provide access to the OMS Manual and training to all personnel involved in the TMS. Requirement 7.5: Implement a formal change management system that triggers the evaluation, review, approval and documentation of all changes to design, construction, operation and monitoring during the tailings facility lifecycle. The change management system shall also include the requirement for a periodic Deviance Accountability Report (DAR), prepared by the EOR, that provides an assessment of the cumulative impact of the changes on the risk level of as-constructed facility. The

DAR shall provide any resulting requirements for updates to the design, DBR, OMS and the monitoring program.

Principle 8

In your view, will compliance with this Principle and its Requirements contribute to the prevention of catastrophic failure of tailings facilities?

Yes

Which aspects of Principle 8 do your comments relate to?

Requirement 8.2

Your comments on Principle 8

Requirement 8.2 - "at appropriate frequencies" - change to "at frequencies required to effectively manage the Tailings Storage Facility".

Topic IV: Management and Governance

Principle 9

In your view, will compliance with this Principle and its Requirements contribute to the prevention of catastrophic failure of tailings facilities?

Partially

Which aspects of Principle 9 do your comments relate to?

Comments on the Principle itself, Requirement 9.2, Requirement 9.1

Your comments on Principle 9

Requirements 9.1 & 9.2 - For very high and extreme consequence facilities, ultimate oversight should be with the Board not an Executive. (Same logic as per 4.2 & 4.3). As investors we want to know that oversight and decision making for these high consequence material risks is residing at the highest level of the company, where our Board nominees can have influence / at very least be aware of status, and where decisions are less susceptible to the internal corporate influences that executives can be exposed to.

Principle 10

In your view, will compliance with this Principle and its Requirements contribute to the prevention of catastrophic failure of tailings facilities?

Yes

Which aspects of Principle 10 do your comments relate to?

Your comments on Principle 10:

Principle 11

In your view, will compliance with this Principle and its Requirements contribute to the prevention of catastrophic failure of tailings facilities?

Partially

Which aspects of Principle 11 do your comments relate to?

Requirement 11.1, Requirement 11.5

Your comments on Principle 11:

Requirement 11.1 - Not nearly robust enough requirement. Everything stems from the risk assessment - the potential failure more, controls, critical controls, measurements, accountabilities, reports etc. If this is wrong the Tailings Management System is a pack of cards. It is not enough to have the risk reviews conducted by a qualified multi-disciplinary team. I suggest aligning with requirement 11.3 and becoming much more specific. e.g. "...including for all High and Extreme Risk facilities an annual risk assessment led by the Accountable Executive and including, at a minimum, the EOR or senior independent technical reviewer and the RTFE". Very important in my experience that the right level of executive participation occurs here. Requirement 11.5 - reporting to the Accountable Executive and ultimately the Board (take out the word 'and/or'). Logic as per 11.1 above.

Principle 12

In your view, will compliance with this Principle and its Requirements contribute to the prevention of catastrophic failure of tailings facilities?

Yes

Which aspects of Principle 12 do your comments relate to?

Your comments on Principle 12:

Principle 13

In your view, will compliance with this Principle and its Requirements contribute to the prevention of catastrophic failure of tailings facilities?

Yes

Which aspects of Principle 13 do your comments relate to?

No

Your comments on Principle 13:

Principle 14

In your view, will compliance with this Principle and its Requirements contribute to the prevention of catastrophic failure of tailings facilities?

Yes

Which aspects of Principle 14 do your comments relate to?

Your comments on Principle 14:

Topic V: Emergency Response and Long-Term Recovery

Principle 15

In your view, will compliance with this Principle and its Requirements contribute to the prevention of catastrophic failure of tailings facilities?

Yes

Which aspects of Principle 15 do your comments relate to?

Requirement 15.3, Requirement 15.4

Your comments on Principle 15:

Requirements 15.3 & 15.4 - Should include requirement for Emergency Response Training for key employees and public sector agencies.

Principle 16

In your view, will compliance with this Principle and its Requirements contribute to the prevention of catastrophic failure of tailings facilities?

Yes

Which aspects of Principle 16 do your comments relate to?

Your comments on Principle 16:

Topic VI: Public Disclosure and Access to Information

Principle 17

In your view, will compliance with this Principle and its Requirements contribute to the prevention of catastrophic failure of tailings facilities?

Yes

Which aspects of Principle 17 do your comments relate to?

Your comments on Principle 17:

Part 3: Your views on the Standard

Your view as to whether the content of the Standard meets your expectations

Your view as to whether the content of the Standard meets your expectations (closed question):

2: Falls somewhat below my expectations

Please summarize why you chose this option:

In general a very good standard. What we are trying to achieve is a very high level of performance in TSF construction, operation and management; and a high degree of transparency around what exists and its performance. High performance requires clear and correct accountabilities matched to level of risk, the right critical controls based on accurate basic data and developed by functional experts, a high level of performance on these controls, and appropriate measurements and verifications to inform on level of performance. With this in mind, certain

accountabilities, degrees of independence and minimum reporting requirements need to be clearer/more robust.

Your view on whether the Standard will create a step change for the industry in the safety and security of tailings facilities

Your view on whether the Standard will create a step change for the industry in the safety and security of tailings facilities (closed question):

3: Will strengthen some but not all aspects of the safety and security of tailings facilities

Please summarize why you chose this option:

As above. Everything stems from the risk assessment - the potential failure mode, controls, critical controls, measurements, accountabilities, reports etc. If this is wrong the Tailings Management System is a pack of cards. It is not enough to have the risk reviews conducted by a qualified multi-disciplinary team. I suggest aligning with requirement 11.3 and becoming much more specific. e.g. "...including for all High and Extreme Risk facilities an annual risk assessment led by the Accountable Executive and including, at a minimum, the EOR or senior independent technical reviewer and the RTFE". Very important in my experience that the right level of executive participation occurs here.

Does the content of the Standard address all aspects of tailings facility management adequately?

Does the content of the Standard address all aspects of tailings facility management adequately (closed question)?

No

Please explain why and/or what is missing:

As above re: accountabilities.

Part 4: Suggestions for topics to be included in the accompanying Recommendations Report

On which topics would you expect to have further clarification or guidance in this document?

Legislation: We should highlight the expectation that companies adopt this standard or local legislation, whichever is higher. In many instances this standard will be in place long before local legislation catches up. The Standard should recommend that, to the extent possible, Governments ensure that legislative and other requirements align to this standard. High performance requires high performance to the right set of requirements. Multiple requirements are the enemy in this regard. Capability: Industry-wide there is a paucity of capability to implement this standard. We certainly have to train more people (engineers, clients and government officials) which will take time. Therefore a phased approach to implementation makes most sense focused on the highest risk facilities first. Should state this in release documentation (not in standard). Minimum Reporting

Requirements: The Standard should be clear on minimum reporting requirements. What we are trying to achieve is a very high level of performance in TSF construction, operation and management; and a high degree of transparency around what exists and its performance. High performance requires clear and correct accountabilities matched to level of risk, the right critical controls based on accurate basic data and developed by functional experts, a high level of performance on these controls, and appropriate measurements and verifications to inform on level of performance. For us as a sophisticated investor we would want to know if the facility is being managed according to the ICMM standard or equivalent; and that performance is reported in a readily available transparency report.

Other information

Non-fitting response text (text submitted which did was not in response to one of the questions above)

Attachment 1 reference (if applicable)

Attachment 2 reference (if applicable)